

# Transient Receptor Potential Channels

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Md. Shahidul Islam  
Editor

# Transient Receptor Potential Channels

 Springer

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*Dedicated to the living memory of my mother  
Sayera Khatun*



# Preface

During a conference titled “TRP channels, from sensory signaling to human disease”, held at the Karolinska Institute, Stockholm, Sweden, on 26th and 27th September, 2009, I was contacted by Springer to publish the proceedings of the conference. After some discussion with some of the speakers, I understood that that was not going to happen. In stead, we were happy to publish a short meeting report [1]. I thought, the excitement and the momentum that resulted from the conference could be utilized in compiling a substantial book rather than a modest conference proceeding. The idea for a TRP book appeared very timely. This field of research has progressed fast and a few books on the TRP channels that have been published before have become outdated. My immediate concern was whether I would have enough time for editing another book. From a previous book “The Islets of Langerhans” (<http://isletbook.islets.se>), I knew that for completing a book, it requires a lot more time and energy than one anticipates at the onset [2]. But my real fear was whether I am the most appropriate person to edit a book on the TRP channels. After all, it is a vast and expanding field dominated by a handful of eminent electrophysiologists and biophysicists. When it comes to the TRP channels, I am at best an enthusiast and by no means an expert. I tried to adopt co-editor(s) but the ones I approached were already over committed. My other concern was whether people read books these days as they used to do in the past; books are, after all, less dynamic than journals and on-line publications. It took me some time, to overcome these perplexing thoughts, and then there was only one thing left for me to do, i.e., to take the idea of this new book on TRP channels to completion as fast and as best as possible at any cost.

During the first few weeks, it became pretty obvious to me that many scientists prefer to spend their time in publishing original papers in high-impact journals rather than in writing book chapters especially if they are not paid any remuneration for their contribution. In most academic environments, a short report in a high-impact journal counts more than an extensive and useful chapter in a book, which, often do not have any impact factors. I wrote to many scientists who have published something on TRP channels in any journal. I contacted scientists whom I knew or whom I met personally. In the end, I was rather overwhelmed that so many authors agreed to contribute a chapter in his book. The enthusiasm among the

authors was noticeably high. My communication with the authors and the referees was fast, smooth, informal, and very satisfying. All authors finally submitted their respective chapters in time. The only chapter that was delayed was mine, a privilege and a problem of being the editor.

In this book one will find diverse information on the TRP channels starting from some of the essential background information to some of the cutting edge researches, from some of the most established facts to some of the most hotly debated issues of our time, and from the structural biology of the channels to the molecular basis of some human illnesses. But it is by no means an encyclopedia. The emphasis was not on making the book as complete as possible but on making the best use of the competence and interests of the authors who agreed to contribute. Some important topics are missing from the book simply because I could not persuade anyone to contribute on those topics. The authors enjoyed enormous freedom in choosing the contents of their respective chapters and in structuring the chapters as they wished. In some instances, more than one chapter was dedicated to somewhat overlapping topics to ensure that different views of different authors can be accommodated in the same book. Many authors have included their own ideas, views, and speculations which can form the basis for new testable hypotheses for future research. In this book there is something for everyone, both for the beginners and for the experts. But it is important that the readers treat the contents of this book just as starting points, question everything that they read in this book and actively find their own answers through further research.

I am grateful to all the authors and the co-authors, who, in spite of their heavy pre-occupation with numerous other activities and deadlines, have worked hard to make their chapters as best as possible within the limited time that they were allotted. When I learnt from several authors that the reasons for delay of their chapters were unexpected personal or family situations or bereavement of a family member, then I paused and reflected; life is not just a bundle of papers. I would like to thank all the referees who have taken time to really read the manuscripts and to come up with very useful comments. The most important thing that I have enjoyed and I have benefited from is the reading of the comments of many referees and the authors' replies to these comments. I wish I could include some of the referees' comments in this book. In spite, of all our efforts, I am worried that the book contains many mistakes that we were not aware of. I will be grateful if readers point out such mistakes and post their comments on the website of the book: <http://trpbook.islets.se>. This will make the book a bit more dynamic and we all will have opportunity to learn from the mistakes.

I believe we shall all be happy, if this book can further intensify research in the field of the TRP channels in the context of understanding human physiology and pathogenesis of human diseases. Let research in this field confer some of the greatest benefits on mankind. Thanks to Karolinska Institutet that has provided the infrastructure for my academic activities over past two decades. Thanks to Melania Ruiz and Ilse Hansen for handling the practical aspects of handling the chapters and rest of the book. This editorial was written on board a high speed train that symbolizes the fast speed of research in the TRP field.



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On board X-2000 between Copenhagen and Stockholm



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